

REMARKS/ARGUMENTS

Claims 14 through 40 are pending in this application. Claims 17, 21-23, and 27-40 are withdrawn from consideration. The amendments made to claims 15 and 16 are pursuant to 37 C.F.R. 1.116, which do not touch upon the merits of the application.

The Office Action rejects claims 14 through 16 under 35 U.S.C. §102(b) as being anticipated by Greenwood. Applicants appreciate the opportunity provided by the Examiner to conduct the telephonic interview of November 25, 2003. In accordance with that interview, Applicants are submitting their position for further consideration.

The Office Action's rejection is based upon the embodiment of Figures 14 through 18, and, in particular, Figure 17 of Greenwood. The Greenwood specification describes this embodiment as follows:

Bottle structure 71 employs an elastic apertured diaphragm 72 in which the individual apertures 73 are illustratively arranged in a square array. Each aperture 73 is a point in configuration when diaphragm 72 is relaxed. Circumferentially about the axis of each aperture 73 a dish-like (preferably hemispherical) recess 74 is located on the concave surface 76 of the domed region 77 of the diaphragm 72. (Greenwood col. 8, lines 37-44).

Applicants have previously made of record a geometric dissection of Figure 17 that shows that the centerline of aperture 73 is

not coincident to the radius that forms the concave curvature of the domed portion.

During the telephonic interview, it was the Examiner's position that other geometric dissections could reveal that the centerline was coincident with the radius that forms the concave curvature of the domed portion and also that the geometric dissection could not be relied upon since this may have been an error in the drawings that are not-to-scale, as well as case law that for certain issues disregards measurements of patent drawings. Applicants respectfully disagree with both of these positions.

In the first instance, the geometric dissection of Figure 17 is based upon the specification of Greenwood that makes clear that domed region 72 is a "segment of a spherical curvature." (Greenwood col. 8, lines 45-52). As such, Applicants' Attorney previously drew the radius of curvature for the spherical segment using a compass according to geometric principles. The drawing was enlarged to make the difference between the radius of curvature and the centerline abundantly clear. Any other such geometric dissections that could purportedly show the centerline coincident with the radius of curvature would be erroneously applying geometric principles.

Additionally, the Office Action's reliance upon case law that states that measurements of drawings are "of little value", is misplaced.¹ Such case law indicates that the measurement of patent drawings to determine dimensions, is improper. See *Hockerson-Halberstadt Inc. v. Avia Group Int'l, Inc.*, 55 USPQ2d

¹ This position was not asserted in the Office Action. However, in an earlier Office Action of May 13, 2002, it was asserted that the "general teachings disclosed by the drawings and specification [] must be considered."

1487, 1491 (Fed. Cir. 2000). However, this same body of case law cautions that "there was some reason for the relationships shown in the drawing and would not regard such disclosure as accidental or arbitrary." *In re Reynolds*, 433 F.2d 384 (CCPA 1971). Applicants' geometric dissection of Figure 17 is not to determine a dimension, but rather to show the relationship between the centerline of aperture 73 and the radius of curvature of spherical diaphragm segment 72, which is non-coincidental. Such relationships, e.g., surfaces that are parallel or surfaces that are converging/diverging, are commonly relied upon and cannot be ignored. To disregard the relationship shown in Figure 17 of Greenwood, which shows the centerline of aperture 73 being non-coincidental with the radius of curvature of diaphragm 72, ignores this body of case law.

Moreover, the Greenwood specification supports the fact that Figure 17 shows the centerline of aperture 73 being non-coincidental with the radius of curvature of diaphragm 72. In describing the method of making the diaphragm 72, Greenwood states:

Each aperture 73 is formed by straight pin puncture through the diaphragm 72 **in the apex region** of each hemispherical recess 74. The pin used (not shown) has a circular cross-section. (Greenwood col. 8, lines 57-60) (emphasis added).

The straight pin puncture is "in the apex region", as opposed to being through the apex, which by definition is the uppermost point of the recess 74. The Merriam-Webster Dictionary defines a "region" as an indefinite area. As such, it is completely consistent with this Greenwood methodology and description that Figure 17 shows the centerline of aperture 73 being non-

coincidental with the radius of curvature of diaphragm 72.

Indeed, Greenwood is describing that the aperture 73 only punctures the indefinite or general apex area of recess 74. Greenwood clearly does not disclose forming the plurality of perforations with each of the centerlines coincident to a radius that forms a concave curvature of the domed portion, as required by independent claims 14 and 16. Greenwood further fails to disclose or suggest that **each** of the centerlines are coincident to the radius of curvature. Still further, Greenwood fails to disclose or suggest that "each of said centerlines of said plurality of perforations [are] formed coincident to a corresponding centerline of one of said plurality of depressions", as required by claim 16.

In an earlier Office Action dated May 13, 2002, it was asserted that "Figure 17 shows a cross section of one of the apertures, wherein a reasonable interpretation is that all of the apertures are the same as that shown in Figure 17." This conclusion ignores the Greenwood description that the puncture is merely in the apex region of the recess rather than through the apex of the recess, and more significantly ignores the methodology described and actually employed by Greenwood.

Greenwood describes making the apertures 73 with a puncture from a "pin" through the spherically shaped or curved diaphragm, as opposed to using a plurality of pins. (Greenwood col. 8, lines 57-60). Additionally, as described in the Declaration of Mr. Manganiello at page 2, paragraph 11, Mr. Greenwood disclosed to the Assignee of the pending application that "the puncture holes were made one at a time by hand using a push pin", which is consistent with the description provided in the Greenwood

specification. Mr. Greenwood supplied the Assignee of the pending Application with about 1,000 of his vent discs as described in the embodiment of Figures 14 through 18 of the Greenwood patent. (Manganiello page 2, par. 11). Further testing of the Greenwood type of vent discs by the Assignee of the pending application, indicated that these puncture holes were "random in terms of point of entry, angle and contact/seal surface area", as described in the Declaration of Mr. Chomik at page 3, paragraph 15. Again, this determination is consistent with the description provided in the Greenwood specification in which the pin puncture is merely "in the apex region." (Greenwood col.8, lines 57-60).

One of ordinary skill in the art using a single pin to puncture an aperture "in the apex region" would be unable to make the punctures at the correct position within each of the depressions and also at the correct angle to ensure that each of the centerlines was coincident with the radius of curvature, as Mr. Greenwood was unable to do. Even more significantly, there was absolutely no motivation for Mr. Greenwood or any one else of ordinary skill in the art at that time to try to make the punctures at the correct position within each of the depressions and also at the correct angle to ensure that each of the centerlines was coincident with the radius of curvature. The Greenwood patent describes that this was not the intent since he was merely trying to puncture "in the apex region."

It was found that the Greenwood type of vent discs with the random punctured angles sometimes leaked. (Manganiello page 4, par. 19). The present invention, as described in claims 14 and 16, was devised by the Applicants in response to this leakage. (Chomik pages 4-5, pars. 17-18). Additional comparative testing

indicated that "improved, optimum air venting and no leakage occurred" with the vent discs having perforations coincident to the radius of curvature. (Chomik page 6, pars. 19-21).

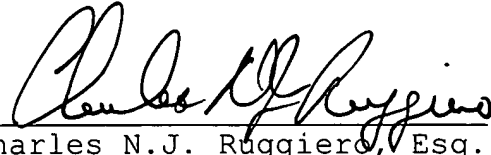
In conclusion, neither the Greenwood reference, Greenwood's actual vent discs, or one of ordinary skill in the art, was or would have made vent discs as described in claims 14 and 16, with each of the centerlines being coincident to a radius that forms a concave curvature of the domed portion, or with each of the centerlines of the plurality of depressions being coincident with a radius that forms a concave curvature of the domed portion and each of the centerlines of the plurality of perforations being formed coincident to a corresponding centerline of one of the plurality of depressions, as described in claim 16.

Claims 15, 18-20, and 24-26 depend from claims 14 and 16, respectively, and, thus, are also not anticipated or obvious in view of Greenwood.¹

In view of the foregoing, applicants respectfully submit that all claims present in this application patentably distinguish over the cited prior art, namely Greenwood. Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejections of the claims. Also, applicants respectfully request that this application be passed to allowance.

¹ The Office Action objects to claims 18-20 and 24-26 as depending from a rejected claim, but asserts that these claims are allowable if rewritten into independent form. For the reasons described above with respect to claims 14 and 16, claims 18-20 and 24-26 are allowable in dependent form.

Dated: December 15, 2003



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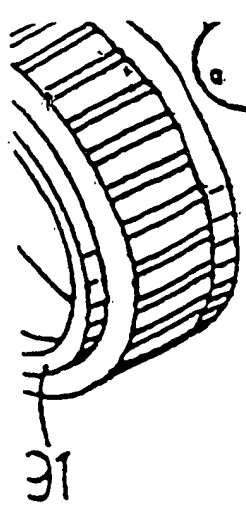


FIG. 17

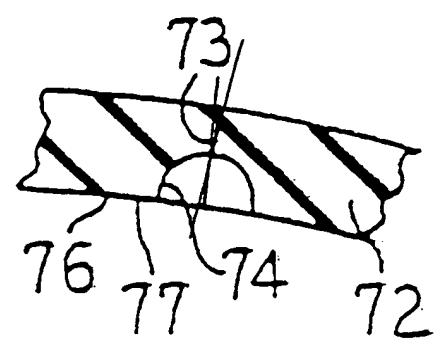


FIG. 15

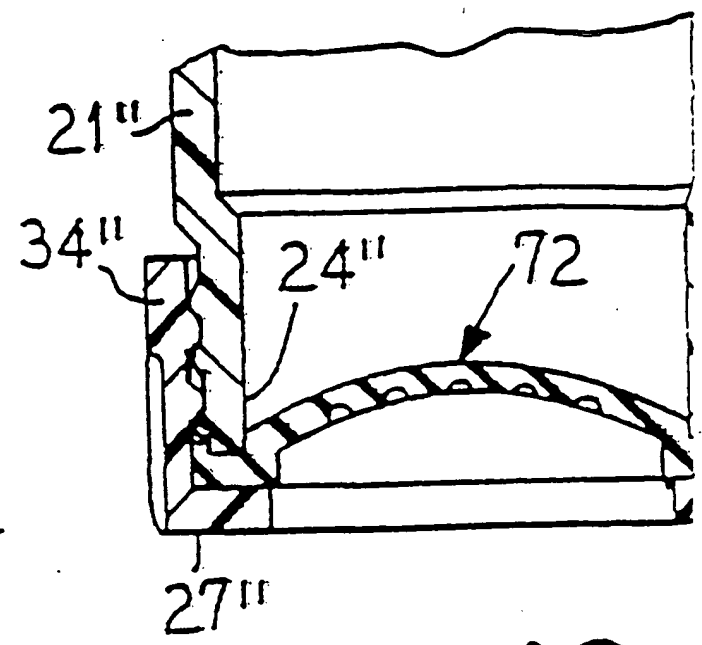
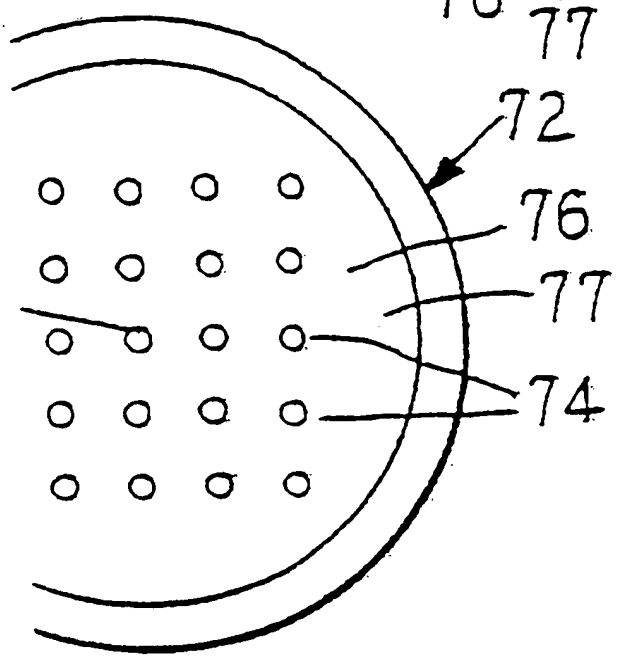


FIG. 19

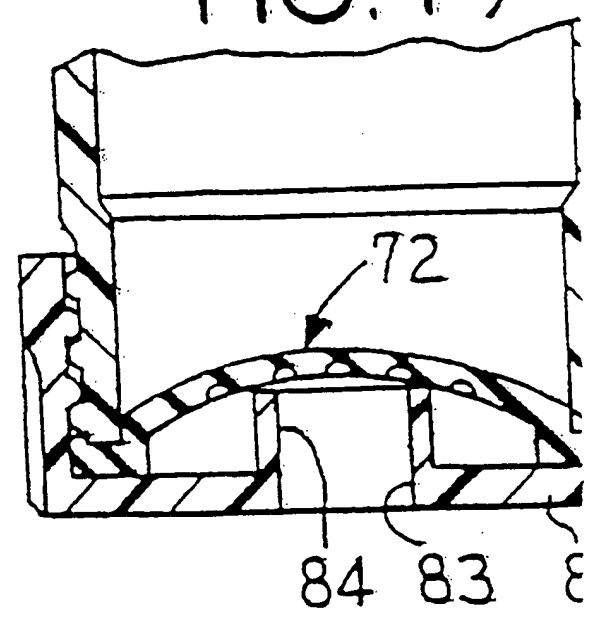


FIG. 16

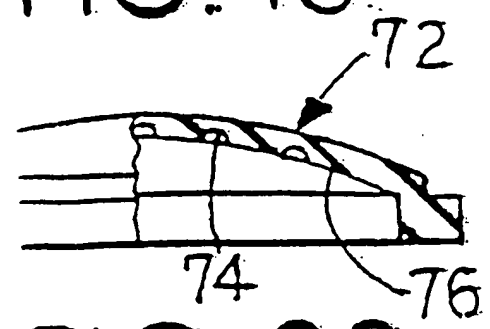


FIG. 20

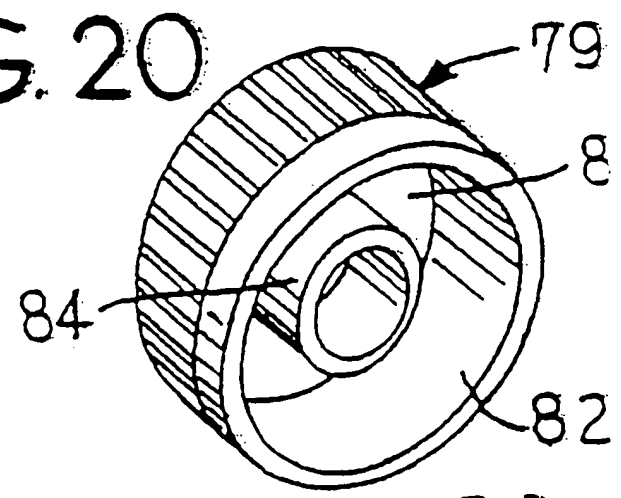


FIG. 22

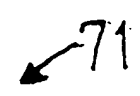


FIG. 21

CONFIDENTIAL AND PRIVILEGEDEXHIBIT II
3/28/2000

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DECLARATION OF FRANCIS X. MANGANIELLO

I, Francis X. Manganiello, hereby declare as follows:

1. I graduated from Northeastern University with a degree in mechanical engineering in 1965. Since then, I have been employed as a mechanical engineer.
2. From 1965 to 1985, I was employed by The Gillette Company as a Senior Project Engineer. My primary responsibilities were to design and develop a wide range of personal care products.
3. From 1985 to 1995, I was Director and Vice President, Design Engineering of Pre-School Toys at Hasbro, Inc.
4. Since January of 1995, I have been employed by Playtex Products, Inc. ("Playtex") as the Director of Research and Development of the Infant Care business.
5. I have approximately five years of experience in the area of venting baby feeding bottles to allow air to flow into the bottle to alleviate the vacuum created in the bottle during feeding. I am a named inventor in four U.S. patents. One patent relates to the venting of baby feeding bottles. I consider myself to be an expert in the venting of baby feeding bottles.

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6. Playtex is the assignee of U.S. Patent Application Serial No. 09/209,070, filed December 10, 1998 (the "Application"), and U.S. Provisional Application 60/069,083 filed December 10, 1997 (the "Provisional") on which the Application claims priority.

7. I am familiar with the Application and the Provisional (hereafter collectively referred to as "the Applications").

8. I am also familiar with U.S. Patent No. 5,499,729, filed March 15, 1994, and assigned to Greenwood et al on March 19, 1996 (the Patent).

9. Playtex has been licensed under the Patent since its issuance.

10. Prior to my employment with Playtex, Mr. Greenwood, an inventor of the Patent, came to Playtex and disclosed his technology to Playtex. After I joined Playtex, I spoke with him by phone approximately four times.

11. Mr. Greenwood provided Playtex with about 1000 domed vent discs. Each vent disc had 36 domed depressions in its underside. The residual material of the vent discs above some of the depressions was punctured through. He told me the puncture holes were made one at a time by hand using a push pin (a pin with a pointed tip with an axially aligned cylindrical head). He never disclosed to me or Playtex any other way, means or system to puncture, pierce or perforate vent discs.

12. At no time did Mr. Greenwood disclose or suggest to me or Playtex that the puncture holes or perforations through the residuals of the vent discs should be perpendicular to the surface to be pierced, or, along or coincident with radii that form the curvature of the domed portion of the discs.

13. At no time did Mr. Greenwood disclose or suggest to me or Playtex that the center lines of the depressions were or were to be coincident with radii that form the dome curvature of the discs, or that the puncture holes or perforations extend or should extend along the center lines of the depressions.

14. At no time did Mr. Greenwood disclose or suggest to me or to Playtex any apparatus or method for simultaneously or automatically puncturing, perforating or otherwise forming the claimed perforations through vent discs.

15. At no time did Mr. Greenwood disclose his patent application for the Patent or the Patent to me.

16. At no time did Mr. Greenwood disclose to me or to Playtex to use slits or that the perforations, punctures or holes should be slits. All of the punctures of the vent discs made by Mr. Greenwood were holes. None were slits.

17. I do not believe that Mr. Greenwood had, but was withholding from Playtex, information on how to make, or on an automated mechanism or method or system for simultaneously making, puncture holes in the residuals of vent discs.

18. At Playtex, I had the responsibility for and supervised the development of the subject matter disclosed in the Application.

19. Prior to the filing of the Provisional, Playtex obtained domed vent discs from Mr. Greenwood's manufacturer of vent discs. The vent discs had domed depressions therein, but the discs were not punctured. We tried puncturing the residual material above each of the 36 domed depressions of the discs by hand with a push-pin. However, we found that the vent discs did not perform satisfactorily and could not be commercialized. Playtex found that the puncture holes formed with push-pins caused tearing of residual vent disc material. It was found that the punctured vent discs sometimes leaked due to the puncture holes.

20. On or about November 8, 1995, Playtex conducted a home panel test (HPT NO.: 95-36) of vent discs that were obtained from Mr. Greenwood's vent disc manufacturer and that Playtex employees pierced by hand with a push pin, as disclosed to us by Mr. Greenwood. Results of the test showed that the nipples of the baby bottles having vent discs with the pierced puncture holes therein sometimes collapsed while the babies of the panel testers tried to suck liquid from the bottles. Nipple collapse indicated to Playtex that too much suction force was required to draw liquid from the bottles because the pierced vent holes of the vent discs were not operating properly. Thus, sometimes, the pierced vent holes did not let air in

quickly enough to properly vent the bottles. The results also showed that pierced holes of the vent discs sometimes leaked.

21. The inventor of the subject matter disclosed and claimed in the Applications, Mr. Chomik, joined Playtex on or about May, 1996. Mr. Chomik was hired as a project engineer and at that time was assigned to work for me. His first project was to develop a commercial vent disc for baby feeding bottles. He was made aware of what Mr. Greenwood had disclosed to Playtex.

22. I am familiar with the U.S. Patent and Trademark Office Action in which the Examiner rejects independent claims 1 and 2 of the Application. The Office Action states that these claims are taught by the Patent.

23. I do not agree with the rejection or with the grounds of rejection.

24. Fig. 19 does not show a vent disc with a plurality of perforations therethrough. There are no perforations in Fig. 19.

25. Fig. 17 does not show a plurality of perforations. Fig. 17 shows only one perforation.

26. The perforation shown in Fig. 17 does not extend along radius that forms the curvature of the domed portion of the vent disc.

27. In Fig. 17, the line representing the perforation is on an angle (not perpendicular) to the inner surface of the residual of the depression that is to be pierced, and it does not appear to extend along radii that form the curvature of the domed portion of the vent disc. Proof that the perforation line is at an angle (not perpendicular) to the surface of the residual of the depression is shown in the enlargement of Fig. 17 attached hereto as Exhibit A.

28. With regard to Fig. 17, the Office Action states that perforations 73 and 74 are inclined at an angle with respect to the vertical of vent disc 72. Assuming the Examiner means that the perforation line is at an angle to the vertical axis through the bottle and through the vent disc, this does not necessarily or without doubt mean that the perforation line is perpendicular to the inner surface of the residual to be pierced, or that the line is along radii that form the curvature of the domed portion of the vent disc.

29. The Office Action states that line or perforation 73 bisects perforation 74 in two. I disagree. First, the number 74 refers to a recess, not a perforation (see, Column 8, line 62). Second, while the point at which the perforation enters the residual may bisect the diameter of the depression, that does not necessarily mean that perforation line 73 is perpendicular to the surface of the residual to be pierced, or is on or coincident with the radius that forms the curvature of the dome of the vent disc.

30. The Office Action states that Fig. 17 is drawn such that line 73 has minimal length in the residual area which would indicate that both of the perforations are perpendicular to the surface to be pierced, and consequently, that the plurality of perforations extend along radii that form the curvature of the domed portion. Again, I disagree. As stated above and as clearly shown in the enlargement, line 73 is not drawn perpendicular. Therefore, line 73 does not have minimal length, and one cannot conclude that the plurality of perforations extend along the radii that form the curvature of the domed portion.

31. Fig. 17 is disclosed in the Patent as being a sectional view taken through a single diaphragm aperture in the diaphragm of Fig. 15 (Column 3, lines 21-23). Since Fig. 17 shows only one aperture, one cannot tell whether each recess 74 is perforated, which aperture of Fig. 15 is sectioned, or from which direction the reader is viewing the section. For these reasons, one cannot say necessarily or without doubt that Fig. 17 teaches the invention claimed in the Application.

32. The Patent discloses that in Fig. 17, aperture 73 is a point (Column 8, lines 40-41) formed by a straight pin puncture (Column 8, lines 57-59). Thus, aperture 73 is not a slit.

33. The Patent does not disclose or suggest the invention defined in the claims of the Application.

34. Because vent discs perforated by hand with push-pins as suggested by an inventor of the Greenwood patent sometimes leaked and sometimes did not vent properly, such vent discs could not be commercialized.

35. The vent disc invention recited in the claims of the Application is a commercial success. The vent disc has been employed in baby bottles commercially sold in the United States since 1998. Since then, over five million of the baby bottles have been sold in the U.S.

36. I believe the sales of the baby bottles since 1998 when the vent disc of the invention was used in the baby bottles, are primarily due to the presence and successful operation of the vent disc in the bottles.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

By 

Francis X. Manganiello
Date: March 28, 2000.

EXHIBIT A

FIG. 18

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FIG. 17

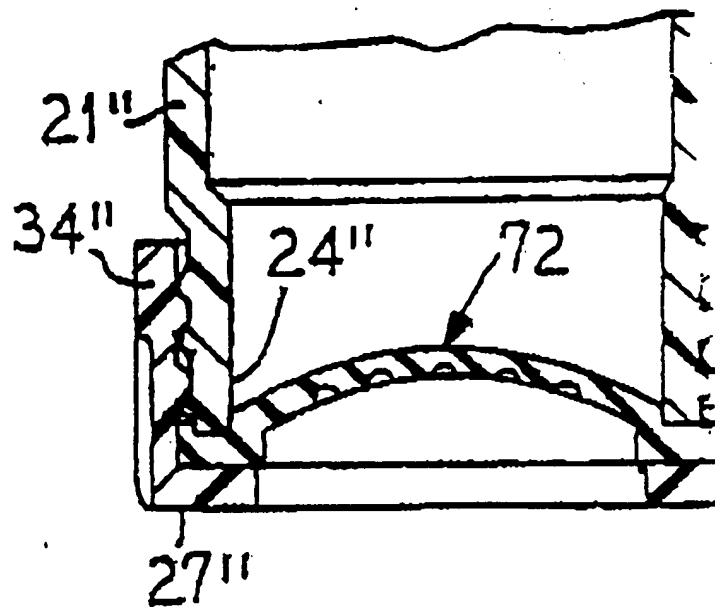
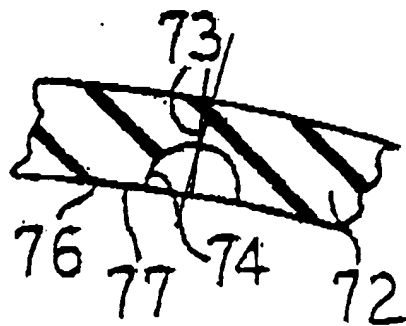


FIG. 19

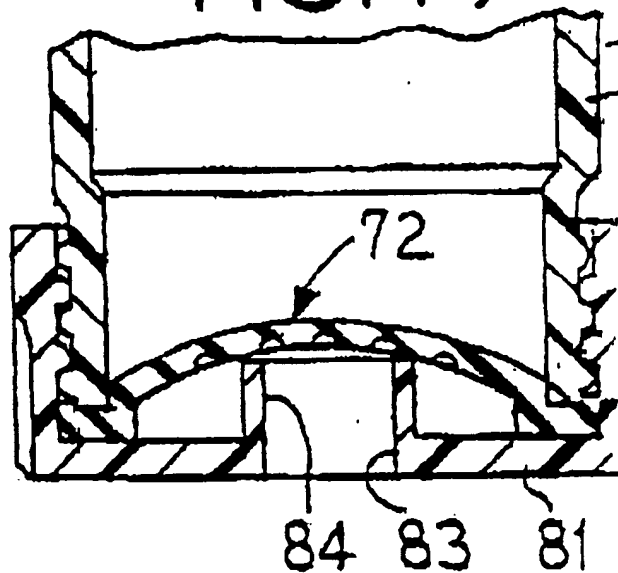


FIG. 20

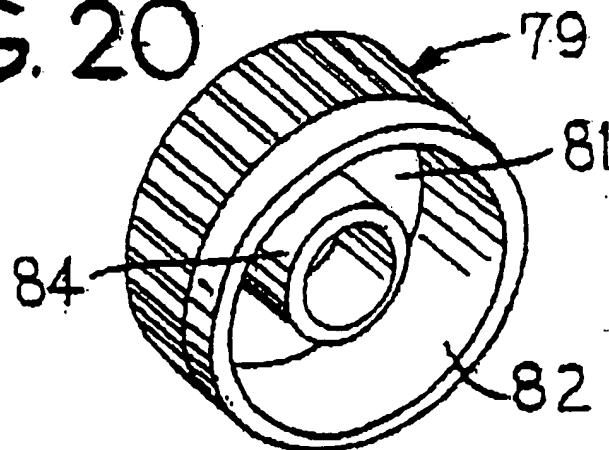


FIG. 21

FIG. 15

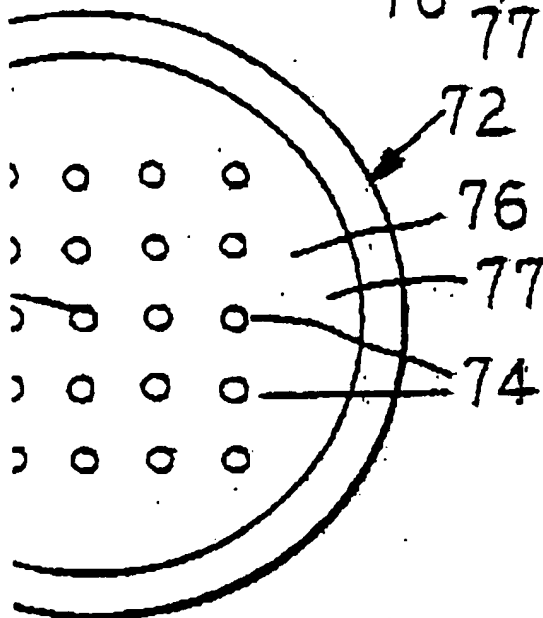


FIG. 16

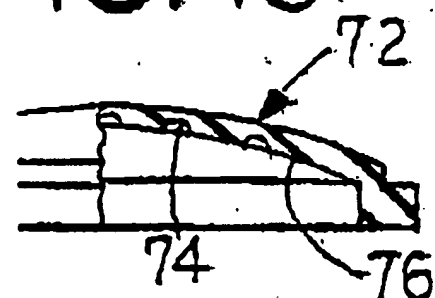


FIG. 22

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Universal Development, Inc.;

Page 2

OHANDT GREELEY

PAGE 02

CONFIDENTIAL and PRIVILEGEDEXHIBIT III
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DECLARATION OF RICHARD S. CHOMIK

I, Richard S. Chomik, hereby declare as follows:

1. I graduated from The New Jersey Institute of Technology with a Bachelor of Science degree in mechanical engineering technology in 1992.
2. From January 1989 through May 1996, I was employed by G.R. Technical Services as an Associate Engineer and Project Engineer.
3. Since May of 1996, I have been employed by Playtex Products, Inc. ("Playtex") in its Infant Care business. I started as a Product Development Engineer. From 1998 to January 2000, I was the Senior Design Engineer, and currently I am the Group Leader for that business.
4. I have approximately four years of experience in the area of venting baby feeding bottles to allow air to flow into the bottle to alleviate the vacuum created in the bottle during feeding.
5. Playtex is the assignee of U.S. Patent Application Serial No. 09/209,070, filed December 10, 1998 (the "Application"), and U.S. Provisional Application 60/069,083 filed December 10, 1997 on which the Application claims priority (the "Provisional").

6. I am familiar with the Application and the Provisional (hereafter collectively referred to as "the Applications").
7. I am also familiar with U.S. Patent No. 5,499,729, filed March 15, 1994, and issued to Greenwood et al on March 19, 1996 (the "Patent").
8. Since May of 1996, I have reported to Mr. Frank Manganiello, Director of Research and Development for the Infant Care business of Playtex. My first project was to develop a commercial vent disc for the bottom of a baby bottle ("The Project"). I became familiar with the vent disc technology that was disclosed to Mr. Manganiello and to Playtex by Mr. Greenwood, one of the inventors of the Patent.
9. I never met Mr. Greenwood. I only spoke with him one or two times.
10. When I started working on the Project, Playtex had domed vent discs that had domed depressions extending upwardly into the underside of the vent discs. The residual material of the vent discs above the depressions had puncture holes therethrough. The puncture holes were formed one at a time by hand by Playtex personnel using a draftsman's compass or a push pin (a pin with a pointed tip with an axially aligned cylindrical head).
11. When Playtex needed additional vent discs to work on, they were supplied to Playtex by Mr. Greenwood's manufacturer of vent discs. The vent discs Playtex

received from Mr. Greenwood's manufacturer were domed and had domed depressions, but were not punctured.

12. When I started on the Project, Playtex was using a draftsman's compass or a push-pin to puncture the residuals above the domed depressions of the vent discs received from Mr. Greenwood's manufacturer.

13. When I started on the Project, all of the punctured vent discs at Playtex had puncture holes made by hand with a draftsman's compass or push-pin.

14. When I started on the Project, I was advised that vent discs having the puncture holes made by hand with a compass or push-pin by Playtex had been home panel tested (the "First Panel Test"). Results of the First Panel Test showed that the nipples of the baby bottles having the vent discs with pierced puncture holes therein sometimes collapsed while the babies of the panel testers tried to suck liquid from the bottles. Nipple collapse indicated to Playtex that too much suction force was required to draw liquid from the bottles because the pierced vent holes of the vent discs were not operating properly. Thus, sometimes the pierced vent holes did not let air in quickly enough to properly vent the bottles. The results also showed that pierced holes of the vent discs sometimes leaked.

15. I used a comparator to examine hand-made puncture holes through vent discs that Playtex had on hand. I found that the puncture holes were randomly formed. They were random in terms of point of entry, angle, and contact/seal

surface area (the latter meaning the surface areas of the wall of the puncture holes that contact each other and/or seal against each other). The puncture holes entered the residual material at various points on the interior surface of the domed depressions and the puncture holes were disposed at various angles through the residuals. Further, the surfaces of the walls of the puncture holes did not correspond to the smooth surface of the compass point or push-pin that formed the holes. The puncture holes were rough and uneven. The edges defining the holes were jagged. It was clear to me that during piercing of the vent disc, the points and pins tore the residual material of the vent disc. Because of this, the puncture holes did not have smooth contact/seal surfaces. They did not form good seals and they sometimes leaked.

16. To solve the leakage problem, I tried piercing the residuals of a small number of the vent discs by hand with a blade having conical (when viewed in vertical section), angular flat surfaces that formed an elongated horizontal sharp tip, as shown in the drawings of the Application. I found that the resulting perforations were slits that had uniform, smooth side edges or wall surfaces that provided adequate surface contact area and adequate smooth seal surface area. This solved the leakage problem.

17. To eliminate the randomness of the puncture holes, I decided that the perforations, preferably slits, should be formed automatically so that they would be substantially uniformly or identically and consistently formed through the residuals of the vent disc.

18. I reviewed a drawing that was made by a Playtex employee, Paul Thom. He made the drawing upon the instructions of Mr. Manganiello. A copy of the drawing is attached hereto as Exhibit A. The drawing shows a vertical section through a domed vent disc having dimples or depressions extending upwardly into the domed central panel of the vent disc. The drawing shows that the axes or centerlines of the depressions radiate from the center of the sphere of the domed portion of the vent disc. Thus, the drawing shows that the center lines of the depressions are coincident with the radii that form the curvature of the domed central panel of the vent disc. The drawing also shows an enlarged vertical section through a portion of a vent disc having a depression therein and shows a line drawn through the center of the depression and through the residual of vent disc material above the depression. Upon observing the drawing, I had the idea to form the perforations automatically and normal, i. e., perpendicular, to the surface of the vent disc to be pierced, or, along radii that form the curvature of the domed portion of the disc, or along the center lines of the depressions, which center lines are along radii that form the curvature of the domed central panel, as disclosed and claimed in the Application. I decided that in order to have a vent disc that could be commercial and to be able to produce commercial vent discs, I had to eliminate the randomness of the perforations. I realized that to do that, the perforations should be formed as stated above, i.e., in accordance with my idea, automatically, consistently and substantially identically, preferably as slits formed by blades having tips as described in paragraph 16 herein.

19. I then developed the apparatus and method disclosed and claimed in the Application. I started with a hand operated bench model apparatus that had a vertically reciprocable table on which a blade, as described in paragraph 16, was mounted. The domed central panel area of vent discs had domed depressions therein as shown in the drawing of Mr. Thom. With the bench model, the domed central panel areas of the vent discs were flattened and the residuals of the domed depressions of the flattened vent discs were pierced. The perforations were made along the radii and center lines, as described in paragraph 18 above.

20. I tested the vent discs that were pierced as described in paragraph 19 above. I found that the perforations of these vent discs did not leak and vented sufficiently to prevent nipple collapse. I also did comparative tests of vent discs whose residuals had hand-made random puncture holes made by Mr. Greenwood and by Playtex.

21. The comparative tests showed that improved, optimum air venting and no leakage occurred with the perforations made with the bench model apparatus according to paragraph 19.

22. About the middle of November of 1996, Playtex conducted a second home panel test (the "Second Panel Test") using baby bottles having nipples and domed vent discs supplied to Playtex by Mr. Greenwood's manufacturer and whose residuals were pierced by use of the bench model apparatus and in the manner described in paragraph 19 above.

23. Results of the Second Panel Test showed that the vent discs and nipples of the baby bottles performed satisfactorily. Although the some panel testers reported some bottle leakage, upon further consultation with the panel testers and further testing, it was determined that the leakage was not due to the perforations. The vent discs did not leak from the slits. The results of the Second Panel Test also showed that venting was satisfactory. Thus, the vent discs that were panel tested were significantly improved over the vent discs that had hand-pierced vent holes formed with a compass or push-pin and that were tested in the First Panel Test.

24. Since the testing of the vent discs that were pierced randomly by hand with a compass or push-pin and that had puncture holes at various angles did not vent as well as the vent discs that were perforated according to paragraph 19 hereof, I determined that when the plurality of perforations were at an angle, even a slight angle, from perpendicular to the surface to be pierced, venting would be over longer (not the shortest) paths and would create a greater propensity for nipple collapse. I concluded therefore that with the longer paths, venting would be negatively affected. Since a bottle nipple can only withstand a limited amount of negative pressure, a plurality of perforation lines at an angle perpendicular to the surface to be pierced, or to the radii or the center lines coincident with the radii, would or could significantly deleteriously affect the venting performance of the vent disc.

25. At no time did Mr. Greenwood disclose or suggest to me or Playtex that the puncture holes or perforations through the residuals of the vent discs should be perpendicular to the surface to be pierced, or along or coincident with radii that form the curvature of the domed central panel of the discs, or that the center lines of the depressions were or were to be coincident with radii that form the domed curvature of the discs, or that the perforations should extend along the center lines of the depressions.

26. At no time did Mr. Greenwood disclose to me or to Playtex any apparatus or method for simultaneously perforating or forming the claimed perforations through vent discs.

27. At no time did Mr. Greenwood disclose his patent application for the Patent or the Patent to me, or to Playtex.

28. At no time did Mr. Greenwood disclose to me or to Playtex to use slits or that the perforations, punctures or holes should be slits. All of the punctures of the vent discs that I saw prior to my developing the blade and bench model apparatus described above were holes. None were slits.

29. I am familiar with the U.S. Patent and Trademark Office Action in which the Examiner's rejected independent claims 1 and 2 of the Application. The Office Action states that these claims are taught by the Patent.

30. I do not agree with the rejection or with the grounds of rejection.
31. Fig. 19 does not show a vent disc with a plurality of perforations therethrough. There are no perforations in Fig. 19.
32. Fig. 17 does not show a plurality of perforations. Fig. 17 shows only one perforation.
33. The perforation in Fig. 17 does not extend along the radius that forms the curvature of the domed portion of the vent disc.
34. In Fig. 17, the line representing the perforation is on an angle (not perpendicular) to the inner surface of the residual of the depression that is to be pierced, and it does not appear to extend along radii that form the curvature of the domed portion of the vent disc. Proof that the perforation line is at an angle (not perpendicular) to the surface of the residual of the depression is shown in the enlargement of Fig. 17 attached hereto as Exhibit B.
35. With regard to Fig. 17, the Action states that perforations 73 and 74 are inclined at an angle with respect to the vertical of vent disc 72. Assuming the Examiner means that the perforation line is at an angle to the vertical axis through the bottle and through the vent disc, this does not necessarily or without doubt mean that the line is perpendicular to the surface of the residual to

be pierced, or that the line is along the radii that form the curvature of the domed portion of the vent disc.

36. The Office Action states that line or perforation 73 bisects perforation 74 in two. I disagree. First, the number 74 refers to a recess, not a perforation (see, Column 8, line 62). Second, while the point at which the perforation enters the residual may bisect the diameter of the depression, that does not necessarily or without doubt mean that the perforation line 73 itself is perpendicular to the surface of the residual to be pierced, or is on or coincident with the radius that forms the curvature of the vent disc.

37. The Office Action states that Fig. 17 is drawn such that line 73 has minimal length in the residual area which would indicate that both of the perforations are perpendicular to the surface to be pierced, and consequently, that the plurality of perforations extend along radii that form the curvature of the domed portion. Again, I disagree. As stated above and clearly shown in the enlargement, line 73 is not drawn perpendicular. Therefore, line 73 does not have minimal length, and one cannot conclude that the plurality of perforations extend along the radii that form the curvature of the domed portion.

38. Fig. 17 is disclosed in the Patent as being a sectional view taken through a single diaphragm aperture in the diaphragm of Fig. 15 (Column 3, lines 21-23). Since Fig. 17 shows only one aperture, one cannot tell whether each recess 74 is perforated, or which aperture of Fig. 15

is sectioned, or from which direction the reader is viewing the section. For these reasons, one cannot say necessarily or without doubt that Fig. 17 teaches the invention claimed in the Application.

39. The Patent discloses that in Fig. 17, aperture 73 is a point (Column 8, lines 40-41) formed by a straight pin puncture (Column 8, lines 57-59). Thus, aperture 73 is not a slit.

40. The Patent does not disclose or suggest the invention defined in the claims of the Application.

41. Because vent discs perforated by hand with push-pins as suggested by an inventor of the Greenwood patent sometimes leaked and sometimes did not vent properly, such vent discs could not be commercialized.

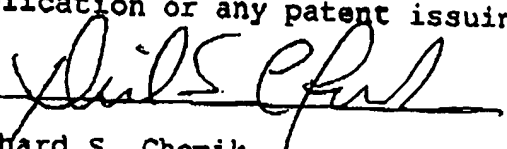
42. The vent disc invention recited in the claims of the Application is a commercial success. The vent disc has been employed in baby bottles commercially sold in the United States since 1998. Since then, over five million of the baby bottles have been sold in the U.S.

43. I believe the sales of the baby bottles since 1998 when the vent disc of the invention was used in the baby bottles, are primarily due to the presence and successful operation of the vent disc in the bottles.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are

punishabl by fin or imprisonm nt, or both, und r Section
1001 of Title 18 of the United States Code and that such
willful false statements may jeopardize the validity of the
application or any patent issuing thereon.

By


Richard S. Chomik
Date: March 28, 2000.

REVISIONS		BY	DATE
1	FROM #2.000, .62;	TO #2.451, .60;	
2			

4 AX TO BE PIERCED THROUGH
TO CENTER OF DIAPHRAGM WITH
SHARP PIN. THE RESULTING
HOLES ARE TO BE SEALED
WHEN AIR PRESSURE ON
TOP SIDE IS EQUAL TO OR
GREATER THAN THAT OF BOTTOM
SIDE.

DETAIL B
SCALE: 40X

RAYTEX PRODUCTS, INC.
215 COLLEGE RD. PARAMUS, N.J. 07652

VENTING DISC.
FOR BUBBLELESS BOTTLE

Mat'l: SILICONE

0-2/1537

EXHIBIT A

BEST AVAILABLE COPY

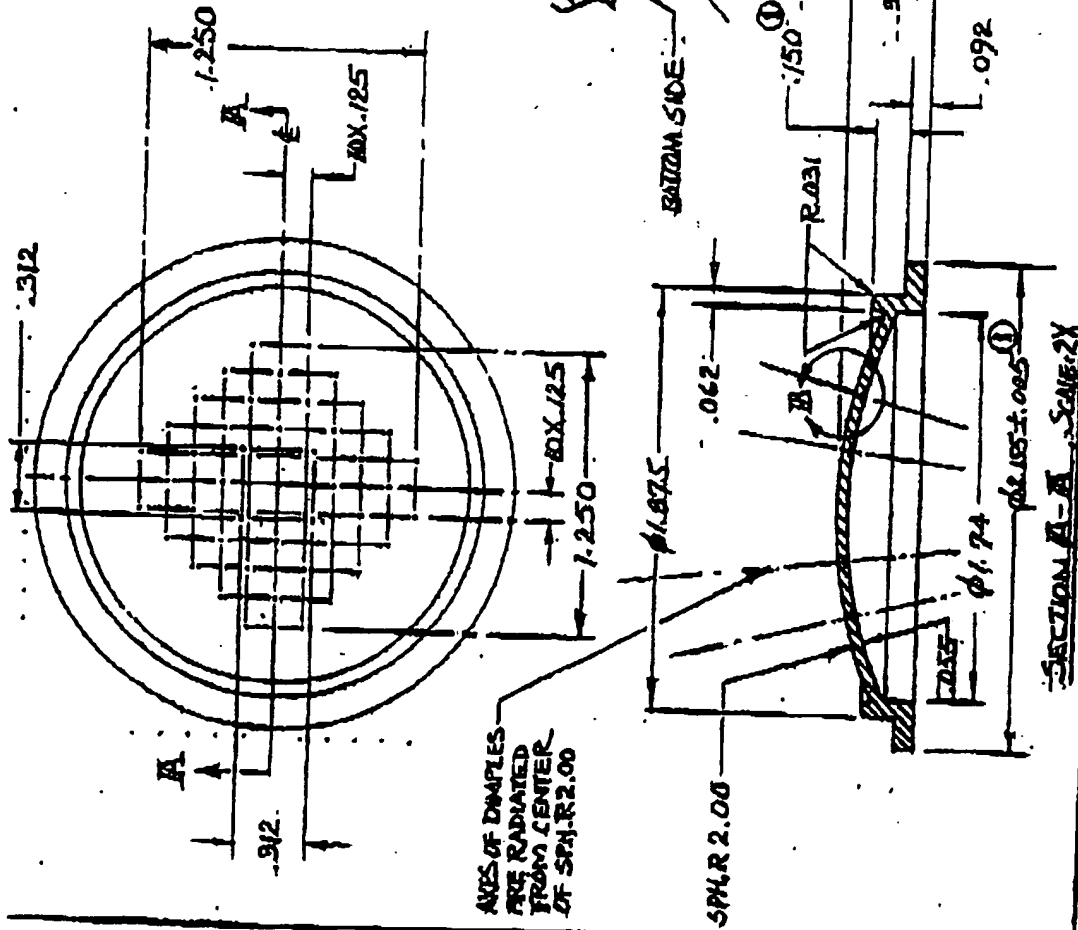




EXHIBIT B

FIG. 18

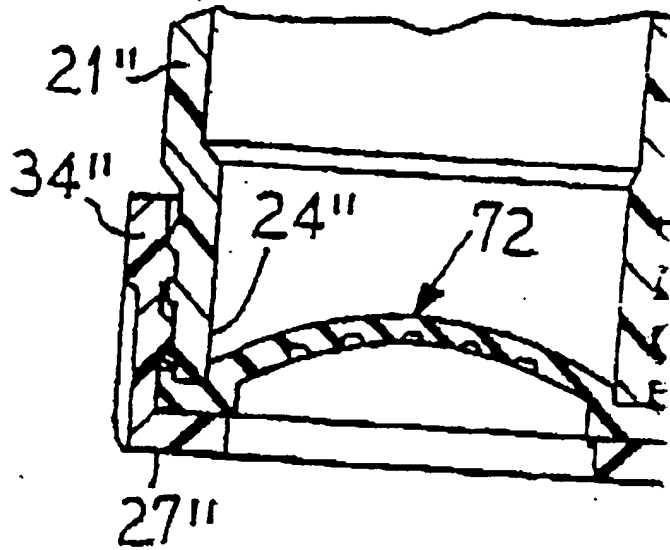


FIG. 17

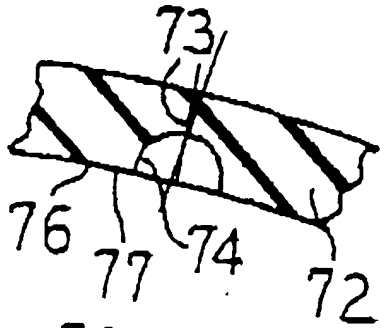


FIG. 19

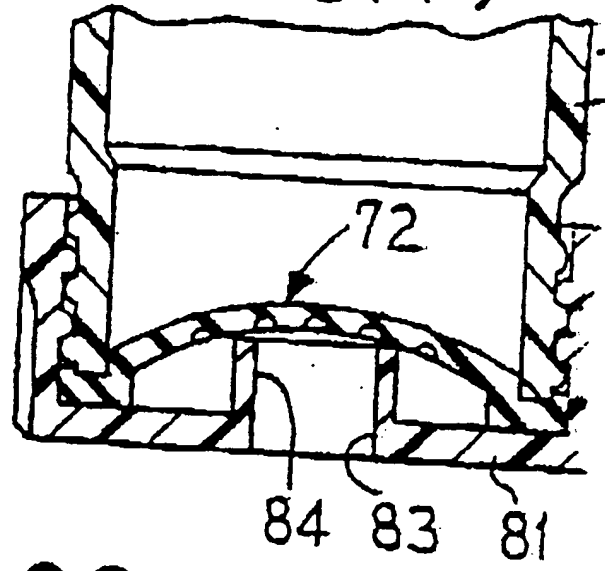


FIG. 20

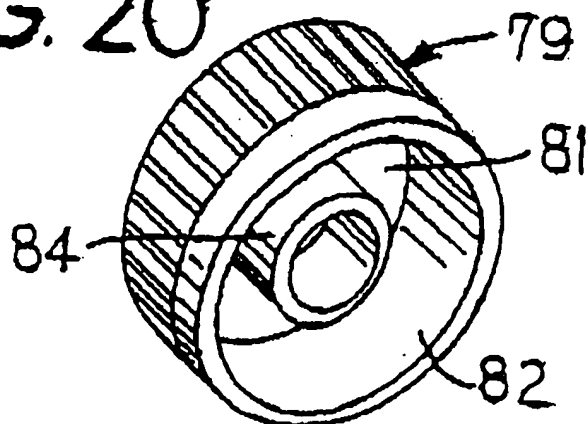


FIG. 21

15

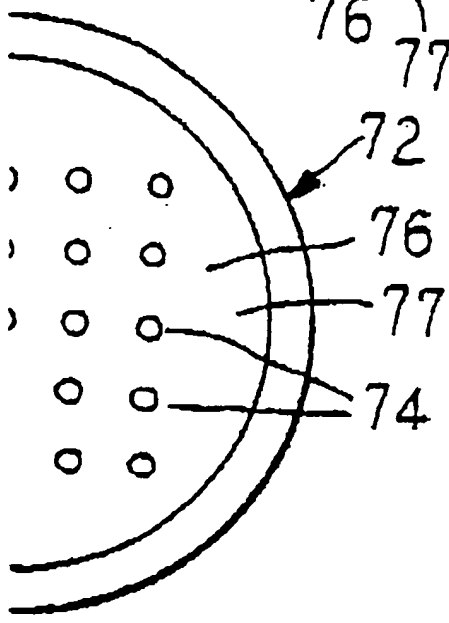


FIG. 16

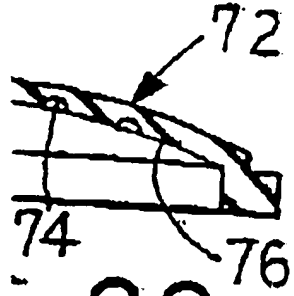


FIG. 22



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